

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. APPLN. NO. 09/759,219
ATTORNEY DOCKET NO Q62673

REMARKS

Applicant thanks the Patent Office for acknowledging Applicant's claim to foreign priority. In the next Communication from the Patent Office, Applicant respectfully requests that the Patent Office indicate that the certified copy of the priority document, Japanese Patent Application No. 2000-007461 dated January 17, 2000, has been made of record in the file. Applicant filed a certified copy of the priority document on January 16, 2001, and encloses a copy of the stamped filing receipt evidencing the receipt of the priority document at the Patent Office.

Applicant thanks the Patent Office for initialing the references listed on the PTO/SB/08 A & B form submitted with the Information Disclosure Statement filed on January 9, 2004 and returning an initialed copy of the PTO/SB/08 A & B, thereby confirming that the listed references have been considered.

Claims 1-5 have been examined on their merits.

Applicant thanks the Patent Office for indicating that claims 4 and 5 are allowed.

Applicants herein editorially amend claims 1, 2 and 4 for reasons of precision of language. The amendments to claims 1, 2 and 4 were made merely to more accurately claim the present invention and do not narrow the literal scope of the claims and thus do not implicate an estoppel in the application of the doctrine of equivalents. The amendments to claims 1, 2 and 4 were not made for reasons of patentability.

The Patent Office objects to claims 2 and 3 as being dependent upon a rejected base claim. Applicant thanks the Patent Office for indicating that claims 2 and 3 would be allowed if

rewritten in independent form. However, instead of rewriting claims 2 and 3 in independent form, Applicant respectfully traverses the prior art rejections for the reasons set forth below.

Claims 1-5 are all the claims presently pending in the application.

1. Claim 1 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Applicant's Admitted Prior Art ("AAPA") in view of Ziperovich (U.S. Patent No. 5,886,842). Applicant traverses the rejection of claim 1 for at least the reasons discussed below.

The initial burden of establishing that a claimed invention is *prima facie* obvious rests on the USPTO. *In re Piasecki*, 745 F.2d 1468, 1472 (Fed. Cir. 1984). To make its *prima facie* case of obviousness, the USPTO must satisfy three requirements:

- a) The prior art relied upon, coupled with the knowledge generally available in the art at the time of the invention, must contain some suggestion or incentive that would have motivated the artisan to modify a reference or to combine references. *In re Fine*, 837 F.2d 1071, 1074 (Fed. Cir. 1988).
- b) The proposed modification of the prior art must have had a reasonable expectation of success, as determined from the vantage point of the artisan at the time the invention was made. *Amgen, Inc. v. Chugai Pharm. Co.*, 927 F.2d 1200, 1209 (Fed. Cir. 1991).
- c) The prior art reference or combination of references must teach or suggest all the limitations of the claims. *In re Vaeck*, 20 U.S.P.Q.2d 1438, 1442 (Fed. Cir. 1991); *In re Wilson*, 424 F.2d 1382, 1385 (CCPA 1970).

The motivation, suggestion or teaching may come explicitly from statements in the prior

art, the knowledge of one of ordinary skill in the art, or, the nature of a problem to be solved. *In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999). Alternatively, the motivation may be implicit from the prior art as a whole, rather than expressly stated. *Id.* Regardless of whether the USPTO relies on an express or an implicit showing of motivation, the USPTO is obligated to provide particular findings related to its conclusion, and those findings must be clear and particular. *Id.* A broad conclusionary statement, standing alone without support, is not “evidence.” *Id.*; *see also, In re Zurko*, 258 F.3d 1379, 1386 (Fed. Cir. 2001).

In addition, a rejection cannot be predicated on the mere identification of individual components of claimed limitations. *In re Kotzab*, 217 F.3d 1365, 1371 (Fed. Cir. 2000). Rather, particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed. *Id.*

The Patent Office acknowledges that the AAPA fails to disclose that the DC offset follow up speed is calculated when a preamble portion is being received. The Patent Office alleges that Ziporovich provides the necessary disclosure to overcome the acknowledged deficiencies of the AAPA.

The combination of the AAPA and Ziporovich fails to teach or suggest, however, at least that the DC offset follow up speed is reduced when a preamble portion is being received, as recited in claim 1. As noted by the Patent Office, Ziporovich discloses, *inter alia*, learning an appropriate DC offset correction value when a disk drive head is reading a known data preamble pattern during acquisition mode. *See* col. 6, lines 13-16 of Ziporovich. There is no disclosure

that during acquisition mode that the known data preamble reduces a DC offset follow up speed, or that the known data preamble even initiates such a reduction. There is no disclosure, and the Patent Office has cited none, that teaches or suggests that the DC offset follow up speed is changed in any way in Ziporovich upon receipt of a preamble. In fact, Ziporovich uses the preamble to adjust the DC offset in a control loop that includes shift registers that add preamble samples together to obtain a DC offset, which is contrary to the invention recited in claim 1. *See, e.g.,* col. 9, line 14 to col. 10, line 8 of Ziporovich. In sum, nothing in the combination of AAPA and Ziporovich teaches or suggests at least that a DC offset follow up speed is reduced when a preamble portion is being received, as recited in claim 1.

A critical step in analyzing the patentability of claims pursuant to 35 U.S.C. § 103(a) is casting the mind back to the time of invention, to consider the thinking of one of ordinary skill in the art, guided only by the prior art references and the then-accepted wisdom in the field. *See In re Kotzab*, 55 U.S.P.Q.2d 1313, 1316 (Fed. Cir. 2000) (*citing In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999)). Close adherence to this methodology is especially important in cases where the very ease with which the invention can be understood may prompt one “to fall victim to the insidious effect of a hindsight syndrome wherein that which only the invention taught is used against its teacher.” *Kotzab*, 55 U.S.P.Q.2d at 1316 (*quoting W.L. Gore & Assocs., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1553 (Fed. Cir. 1983)). Applicant respectfully submits that the Patent Office’s obviousness determination is based on hindsight reconstruction, and not the objective teachings of the prior art. Furthermore, Applicant submits that even if one were to combine the AAPA and Ziporovich, the resulting combination would not arrive at the present

invention, since there is no disclosure, either in the AAPA or Ziporovich, that teaches or suggests that a received preamble portion is used to DC offset follow up speed. Thus, Applicant submits that the Patent Office cannot fulfill the “all limitations” prong of a *prima facie* case of obviousness, as required by *In re Vaack*.

Since neither AAPA nor Ziporovich disclose at least that a DC offset follow up speed is reduced when a preamble portion is being received, Applicant submits that one of skill in the art would not be motivated to combine the two references. *In re Dembiczak* and *In re Zurko* require the Patent Office to provide particularized facts on the record as to why one of skill would be motivated to combine the references. Without a motivation to combine, a rejection based on a *prima facie* case of obviousness is improper. *In re Rouffet*, 149 F.3d 1350, 1357 (Fed. Cir. 1998)). The level of skill in the art cannot be relied upon to provide the suggestion to combine references. *Al-Site Corp. v. VSI Int’l Inc.*, 174 F.3d 1308 (Fed. Cir. 1999). The Patent Office must make specific factual findings with respect to the motivation to combine references. *In re Lee*, 277 F.3d 1338, 1342-44 (Fed. Cir. 2002). Although the Patent Office provides a motivation analysis with respect to finding a “learning curve” by using a preamble, both the AAPA and Ziporovich lack any teaching or suggestion about the reduction of a DC offset follow up speed being reduced when a preamble of a data frame is received at a receiving circuit. The Patent Office’s assertion with respect to the “learning curve” is inapplicable, since Ziporovich discloses an entirely different method than that recited in claim 1. Ziporovich uses the preamble to adjust the DC offset in a control loop that includes shift registers that add preamble samples together to obtain a DC offset. *See, e.g.*, col. 9, line 14 to col. 10, line 8 of Ziporovich. In the present

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. APPLN. NO. 09/759,219
ATTORNEY DOCKET NO Q62673

invention, the preamble is used to signal for a reduction in the DC offset follow up speed. Thus, Applicant submits that the Patent Office cannot fulfill the motivation prong of a *prima facie* case of obviousness, as required by *In re Dembiczak* and *In re Zurko*.

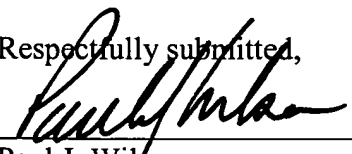
Based on the foregoing reasons, Applicant submits that the combination of AAPA and Ziporovich fails to teach or suggest all of the claimed elements as arranged in claim 1. Therefore, the combination of AAPA and Ziporovich clearly cannot render the present invention obvious as recited in claim 1. Thus, Applicant submits that claim 1 is allowable, and respectfully requests that the Patent Office withdraw the § 103(a) rejection of claim 1.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE
23373
CUSTOMER NUMBER

Respectfully submitted,

Paul J. Wilson
Registration No. 45,879

Date: July 26, 2004